

## Effects of sports nutrition education intervention on sports nutrition knowledge, attitude and practice, and dietary intake of Malaysian team sports athletes

### ABSTRACT

**Introduction:** The purpose of this study was to determine the effects of sports nutrition education intervention on improvements in sports nutrition knowledge, attitude and practice (KAP), and dietary intake among Malaysian team sports athletes. **Methods:** A total of 105 male participants representing four team sports under the elite sports programme were recruited based on a name list provided by National Sports Council of Malaysia. Teams were assigned by stratified random sampling to either the experimental group (EG) (n=52) or the comparison group (CG) (n=53). The EG received seven weeks of education intervention programme based on a validated booklet covering basic sports nutrition for team sports. A self-administered sports nutrition KAP questionnaire and dietary intake assessment of total energy, carbohydrates, proteins and fats based on three-day food records was conducted before and after the intervention. **Results:** There were significant increments ( $p < 0.001$ ) in the EG's post-intervention mean scores for knowledge ( $6.21 \pm 2.95$ ), attitude ( $9.04 \pm 6.65$ ) and practice ( $4.39 \pm 4.27$ ) compared to decrements in the respective mean scores of the CG ( $-2.15 \pm 1.45$ ;  $-1.72 \pm 5.06$ ;  $-0.74 \pm 2.32$ ). Significant improvements were found in the EG's total energy intake, total carbohydrate and total protein intake compared to those of the CG. **Conclusion:** The sports nutrition education intervention was useful in improving the sports nutrition KAP scores, total carbohydrate and total protein intake of team sports athletes.

**Keyword:** Athletes; Intervention study; Dietary intake; Sports nutrition; Knowledge